REMARKS

Claims 1-18, 20-26, 31-48, 50, 52-60, 72-79, 88, 90, and 91 stand rejected, of which claims 1 and 88 are independent.

The Applicant has amended claims 1, 17, 18, 20, 21 and 88 and cancelled claim 16. No new matter has been introduced. Favorable reconsideration of the final action mailed May 13, 2008 ("Final Action") is respectfully requested in view of the forgoing amendments and the following remarks.

35 U.S.C. § 102 Rejections

Claims 1-5, 7-11, 13, 14, 16, 20-23, 31, 32, 34, 36-38, 40-48, 50, 52-56, 59, 60, 72-79, and 88 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chislenko et al. (US 6,041,311).

Claim 1, as amended, recites

> ...
> on a computer, computing parameters associated with the one or more groups using the user related data, including **[1]** for each of the one or more groups of users, **computing predicted ratings** of a set of items by a typical non-specific user of the group;
> on a computer, computing personalized statistical parameters for each of one or more individual users using the parameters associated with said user's group of users and the stored data based on the history of ratings of items by that user; and
> **[2]calculating predicted ratings** of the set of items by each of one or more users **using the computed predicted ratings** of the set of items by the typical non-specific user of the group and the personalized statistical parameters for that user. **[annotated by the Applicant]**

Part **[1]** of claim 1 requires "computing predicted ratings of a set of items by a typical non-specific user of the group." This is supported at least by FIG. 3 (reproduced below) and paragraph [027] of the Specification, which states:

> [027] ... Cohort data 280 also includes a cohort rating or fixed-effect vector **f** 298, whose elements are the **expected rating** f_{id} of each item i based on the sample histories of the cohort d that "best" represent a typical user of the cohort.
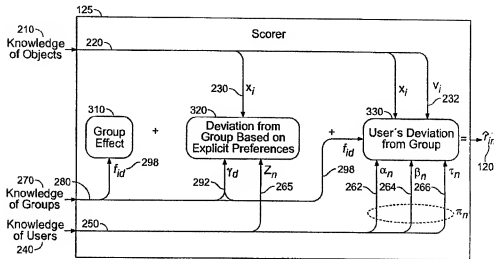
FIG. 3

Part [2] of claim 1 requires "calculating predicted ratings of the set of items by each of one or more users using the computed predicted ratings of the set of items by the typical non-specific user of the group and the personalized statistical parameters for that user." This is supported at least by FIG. 3 and paragraph [030], which describes a manner in which the scorer 125 computes an expected rating $\hat{r}_{in}$ for an item i that user n has not yet rated:

> [030] The scorer 125 computes $\hat{r}_{in}$ based on a number of sub-estimates that include:
>
>   a.   A cohort-based prior rating f_{id} 310, which is an element of **f** 298.
>
>   b.   An explicit deviation 320 of user i's rating relative to the representative or prototypical user of the cohort d to which the user belongs that is associated with explicitly elicited deviations in preferences for the attributes x_i 230 for the item...
>
>   c.   An inferred deviation 330 of user i's rating (...) arises from any non-zero personal parameters, α_n 262m β_n 264, and τ_n 266, in the state of knowledge of users 130...

In other words, claim 1 requires computing at least two classes of predicted ratings, the first class being the "predicted ratings of a set of items by a typical non-specific user of the group" recited in part **[1]** and the second class being the "predicted ratings of the set of items by each of one or more users" recited in part **[2]**. Further, the computation of the second class of predicated ratings relies on the computation of the first class of predicated rating as well as the personalized statistical parameters of that user.

Now we turn to the Examiner's comments.

The Examiner asserts in paragraph 4, page2 of the Final Action that column 10, lines 10-15 of Chislenko teaches the use of "clustering and similarity factors" to predict a rating for an "average user of the group." Column 10, lines 10-15 of Chislenko states:

> In another embodiment the user selects an item for which a predicted rating is desired. A rating can be predicted by taking a weighted average of the ratings given to that item by the user's neighboring users.

The Examiner has repeatedly taken the position that Chislenko's "taking a weighted average of the ratings given to that item by the user's neighboring users" corresponds to "computing predicted ratings of a set of items by a typical non-specific user of the group" as required in part **[1]** of Claim 1. The Applicant respectfully disagrees with this position for at least the reasons previously communicated to the Examiner (e.g., in responses filed on July 14, 2008 and August 13, 2008).

Further, the Applicant submits that, solely for the sake of arguments, even if Chislenko's "weighted average of the ratings" were considered as corresponding to the "predicted ratings of a set of items by a typical non-specific user of the group," which the Applicant does not concede, no portion of Chislenko teaches using the "**predicted** ratings of the set of items by the typical non-specific user of the group" for "calculating the predicted ratings of the set of items by each of one or more users" as required in part **[2]** of claim 1. More specifically, in Chislenko, a predicted rating, once computed for a user, is not used at a later time for calculating any predicted ratings for this user or any other

users, as can be seen in column 2, lines 20-30 of Chislenko, which describes the manner in which the Chislenko system predicts ratings:

> ... A plurality of users that are closely correlated to a particular user are selected as that user's neighboring users and a weight is assigned to each of them. **The ratings given to items by the neighboring users** as well as the weights assigned to those neighboring users are then used to predict ratings and to make recommendations of items that the user has not yet rated. (emphasis added).

In other words, Chislenko predicts ratings for a user using the **actual** ratings given by the user's neighboring users. No portion of Chislenko teaches "calculating predicted ratings of the set of items by each of one or more users **using the computed predicted ratings** of the set of items by the typical non-specific user of the group and the personalized statistical parameters for that user," as required in part **[2]** of claim 1. Therefore, Chislenko fails to disclose all of the limitations of claim 1.

For at least these reasons, independent claim 1 as amended and its dependents are allowable over Chislenko.

The forgoing remarks also apply to independent claim 88 as amended, which has corresponding limitations.

35 U.S.C. § 103 Rejections

Claims 6, 12, 15, 17, 18, 24-26, 33, 35, 39, 57, and 58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chislenko.

The dependent claims are allowable for at least the reasons that apply to the independent claims from which they depend.

Conclusion

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any

claim, except as specifically stated in this paper, and the amendment of any claim does

not necessarily signify concession of unpatentability of the claim prior to its amendment.

The Request for Continued Examination fee in the amount of $405 and the

Petition for Extension of Time fee in the amount of $245 is being paid concurrently

herewith on the Electronic Filing System (EFS) by way of Deposit Account

authorization. Please apply any other charges to Deposit Account No. 50-4189,

referencing Attorney Docket No. 30003-002001.

Respectfully submitted,

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